COURSE OUTLINE

(1) GENERAL

SCHOOL	Medical		
ACADEMIC UNIT	Medical School		
LEVEL OF STUDIES	Graduate		
COURSE CODE	NEURO-203	SEMESTER	2
COURSE TITLE	Regenerative Pharmacology		

INDEPENDENT TEACHING ACTIVITIES *if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits*	WEEKLY TEACHING HOURS	CREDITS
Lectures, writing tests, students'presentations	4	3
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).		

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	Elective
PREREQUISITE COURSES:	None
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	English
IS THE COURSE OFFERED TO ERASMUS STUDENTS	Yes
COURSE WEBSITE (URL)	

(2) LEARNING OUTCOMES

Learning outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.

Consult Appendix A

- *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area*
- *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B*
- *Guidelines for writing Learning Outcomes*

The aim of the course is to introduce the students to the basic issues of regeneration and degeneration of the Nervous System and to the pharmacological approaches for the treatment of pathological disorders related to these processes. The cellular and molecular mechanisms involved in the processes of proliferation, differentiation and cell death of mature and progenitor nerve and glial cells, the signaling mechanisms during embryonic and adult neurogenesis and the pathological conditions related to these processes are analyzed. Finally, novel therapeutic approaches based on the aforementioned physiological processes are presented form the students.

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with the use of the necessary technology
Adapting to new situations
Decision-making
Working independently
Team work
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Project planning and management
Respect for difference and multiculturalism
Respect for the natural environment
Showing social, professional and ethical responsibility and sensitivity to gender issues
Criticism and self-criticism
Production of free, creative and inductive thinking
……
Others…
…….

Search for, analysis and synthesis of data and information, with the use of the necessary technology
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(3) SYLLABUS

Neurogenesis and stem cells
Neurodegeneration and neuroregeneration
Adult neurogenesis and its role in neurodegenerative diseases
Human induced Pluripotent stem cells and their clinical applications
Students presentations
Students presentations
Students presentations
Students presentations
Students presentations

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Face-to-Face
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, communication with students*	UoC E-learn platform, *communication with students*
TEACHING METHODS *The manner and methods of teaching are described in detail.* *Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.* *The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS*	

Activity	*Semester workload*
Lectures	12
Study and analysis of bibliography, interactive teaching	144
Writing tests	10
Course total	***75***

STUDENT PERFORMANCE EVALUATION *Description of the evaluation procedure* *Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other* *Specifically-defined evaluation criteria are given, and if and where they are accessible to students.*	The evaluation is performed in English language Students prepare and present on a specific research question based on a research article or review article. Examination is based on oral questions from the course leaders during the presentation. The criteria and evaluation method are announced during the 1st meeting of the course and posted on e-learn

(5) ATTACHED BIBLIOGRAPHY

- Suggested bibliography: Rang & Dale Pharmacology, review and research papers

- Related academic journals: Nature, Cell, Science, Pharmacology and Therapeutics, Neuropharmacology, Cell Stem Cell, Stem Cell Reports, npg Regenerative Medicine